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In the Specification:

Replace the paragraphs beginning "According to the invention . . ." on page 4, line 17 and ending "electrodes." on page 5, line 14, with the following new paragraph:

According to the invention in one aspect there is provided a reactor for the plasma assisted processing of a gaseous medium, the reactor including a pair of electrodes having facing surfaces and spaced from each other for providing a separation therebetween, the separation of the facing surfaces being substantially uniform and defining a space therebetween between the pair of electrodes, and a body of dielectric material positioned to provide for providing a dielectric barrier between the pair of electrodes (1,2; 21,22) and configured to divide for dividing the said space between the pair of electrodes (1,2; 21,22) into a plurality of gas passages (6;24), the gas passages providing which together provide the plasma volume of for the reactor, the gas passages having lengths along and along the lengths of which gas flows during in use of the reactor, the gas passages (6;24) being aligned so that the lengths extend between and in a direction parallel with the facing surfaces of the pair of electrodes (1,2; 21,22), the gas passages being spaced apart from one another in a direction transverse perpendicular to the said facing surfaces, characterised in that the gas passages (6;24) are shaped so as to have including a pair of opposed sides the having a contour of which matches the contour of the said facing surfaces of the pair of electrodes (1,2; 21,22), this the shape and the spacing of the gas passages being such that providing for a substantially uniform distribution of electric field occurs across the plasma volume space between the pair of electrodes.

According to the present invention in a second aspect there is provided a reactor wherein the, the pair of electrodes are embedded in a the body of dielectric material